

**Abstract**

A honeycomb filter includes an array of interconnecting porous walls which define an array of first channels and second channels. The first channels are bordered on their sides by the second channels and have a larger hydraulic diameter than the second channels. The first channels have a square cross-section, with corners of the first channels having a shape such that the thickness of the porous walls adjoining the corners of the first channels is comparable to the thickness of the porous walls adjoining edges of the first and second channels.